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Notice of Allowability	Application No.	Applicant(s)	
	09/806,913	HIRABAYASHI ET AL.	
	Examiner	Art Unit	
	Brian L. Mutschler	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed March 25, 2004.
2. ☒ The allowed claim(s) is/are 1,2,5,8-10,13 and 15-19.
3. ☒ The drawings filed on 06 April 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

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|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20040517</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Shrinath Malur on May 17, 2004.

The application has been amended as follows:

In the claims:

- a. In claim 1 at line 4, please delete the word "and".
- b. In claim 1 at lines 7-8, please replace the phrase "relatively to said wafer-shaped part, wherein said body includes," with the following phrase:

--relatively to said wafer shaped part; and

means for moving the wafer-shaped part relative to said body to
form an electroosmotic flow sequentially in said passages;

wherein said body includes,--
- c. In claim 1 at lines 16-17, please delete the phrase ", and said wafer part moves relatively to said body to form an electroosmotic flow in one of said passages".
- d. In claim 5 at line 4, please insert --said-- before "passages".
- e. In claim 9 at line 4, please delete the word "and".

- f. In claim 9 at lines 7-8, please replace the phrase "relative manner, wherein said body includes:" with the following phrase:
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- relative manner; and
- means for moving the wafer-shaped part relative to said body to form an electroosmotic flow sequentially in said passages;
- wherein said body includes:--
- g. In claim 9 at lines 15-17, please delete the phrase ", wherein said wafer-shaped part moves relatively to said body to form an electroosmotic flow in one of said passages".
- h. Please cancel claim 14.
- i. In claim 15 at lines 5, please delete the word "and".
- j. In claim 15 at line 7, please insert the phrase --and means for moving the wafer-shaped part relative to said body to form an electroosmotic flow sequentially in said passages,-- after the phrase "relative manner,".
- k. In claim 15 at lines 17-19, please delete the phrase ", wherein said wafer-shaped part moves relatively to said body to form an electroosmotic flow in one of said passages".
- l. In claim 16 at line 5, please delete the word "and".
- m. In claim 16 at line 7, please insert the phrase --and means for moving the wafer-shaped part relative to said body to form an electroosmotic flow sequentially in said passages,-- after the phrase "relative manner,".

- n. In claim 16 at lines 17-19, please delete the phrase “, wherein said wafer-shaped part moves relatively to said body to form an electroosmotic flow in one of said passages”.
- o. In claim 17 at line 5, please delete the word “and”.
- p. In claim 17 at line 7, please insert the phrase --and means for moving the wafer-shaped part relative to said body to form an electroosmotic flow sequentially in said passages,-- after the phrase “relative manner,”.
- q. In claim 17 at lines 19-21, please delete the phrase “, wherein said wafer-shaped part moves relatively to said body to form an electroosmotic flow in one of said passages”.
- r. In claim 18 at line 5, please delete the word “and”.
- s. In claim 18 at line 7, please insert the phrase --and means for moving the wafer-shaped part relative to said body to form an electroosmotic flow sequentially in said passages,-- after the phrase “relative manner,”.
- t. In claim 18 at lines 19-21, please delete the phrase “, wherein said wafer-shaped part moves relatively to said body to form an electroosmotic flow in one of said passages”.
- u. In claim 19 at line 5, please delete the word “and”.
- v. In claim 19 at line 7, please insert the phrase --and means for moving the wafer-shaped part relative to said body to form an electroosmotic flow sequentially in said passages,-- after the phrase “relative manner,”.

- w. In claim 19 at lines 20-22, please delete the phrase “, wherein said wafer-shaped part moves relatively to said body to form an electroosmotic flow in one of said passages”.
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2. The following is an examiner's statement of reasons for allowance:

The instant application is distinguished over the prior art of record by providing a capillary electrophoresis system comprising a wafer-shaped part, a body for removably holding the wafer-shaped part and to move relative to the wafer-shaped part, and means for moving the wafer-shaped part relative to the body to form an electroosmotic flow sequentially in the passages within the wafer-shaped part, wherein the body comprises electrodes and reservoirs. In prior art systems, such as that taught by Parce et al. (U.S. Pat. No. 6,413,782), a wafer-shaped part is removably held within a body in a position in which electrophoresis is carried out, but the system comprises no means for moving the wafers relative to the body to sequentially create electroosmotic flow in each of the passages. Simpson et al. (U.S. Pat. No. 6,017,434) disclose a wafer-shaped part held within a body for electrophoretic separation, but does not teach a means for moving the wafer relative to the body to sequentially establish the flow in the passages. The prior art of record does not provide a teaching or suggestion to make a system having a wafer moved relatively to a body by a moving means to establish electroosmotic flow sequentially in the passages. This feature creates an advantageous improvement over the prior art of record by providing a system that can readily and reliably interface with a detection system such as the claimed mass-spectrometer.

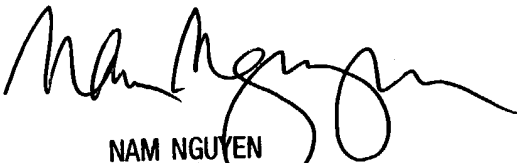
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Mutschler whose telephone number is (571) 272-1341. The examiner can normally be reached on Monday-Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

blm
May 18, 2004


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